

### REMARKS

Claims 1-4, 6-7, 12, 15, 20-21, 23, 25, 27, 31, 34-36, 38, and 47 are currently pending in the subject application and are presently under consideration. Claims 1 and 47 have been amended as shown on pages 2-6 of the Reply. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

#### **I. Rejection of Claims 1-3, 12, 15, 31, 34-35 and 38 Under 35 U.S.C. §103(a)**

Claims 1-3, 12, 15, 31, 34-35 and 38 stand rejected under 35 U.S.C. §103(a) as being anticipated by Liversidge *et al.* (US 2002/0076025) in view of Horvitz *et al.* (US 6,021,403). Withdrawal of this rejection is requested since Liversidge *et al.* and Horvitz *et al.* fails to teach or suggest all aspects of subject claims.

A single prior art reference anticipates a patent claim only if it ***expressly or inherently describes each and every limitation*** set forth in the patent claim. *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). ***The identical invention must be shown in as complete detail as is contained in the ... claim.*** *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Applicants' claimed invention relates to system and method to facilitate meetings, collaboration, coordination and communications between message senders and receivers, wherein a prediction model is constructed from past presence, actions, and calendar of a user to forecast the timing of the user's availability status. To this end, independent claim 1 recites ***an e-mail service that generates dynamically customized automated responses to one or more messages based on a user's availability and a prediction model that predicts, based on the communication, collaboration and coordination, future availability and unavailability of the user, and an amount of time until the user returns to the communication, collaboration and coordination..*** Liversidge *et al.* and Horvitz *et al.* are both silent regarding such novel aspects of the claimed invention.

Liversidge *et al.* relates to method and system for automatic handling of invitations to join communication sessions in a virtual team environment. Communication sessions are

automatically set up by the collaboration services suite in response to request messages generated by the VTE (virtual team environment) client when a team member initiates a communication session request using a GUI (graphical user interface). The Examiner concedes that Liversidge *et al.* does not teach all limitations of the subject independent claim, and attempts to compensate for the deficiencies of Liversidge *et al.* by citing to Horvitz *et al.* Horvitz *et al.* provides an intelligent user assistance facility to software users and optimizes functionality of computer systems and software by performing inferences about user's needs and preferences in the operation of software systems or applications.

On page 4 of the Office Action, the Examiner asserts that Liversidge *et al.* substantially teaches ***an e-mail service that generates dynamically customized automated responses to one or more messages based on a user's availability***. Applicants' representative respectfully disagrees. The cited document provides a status table for each member of the team that contains a logged-in frame, a device frame and a watcher's frame. The logged-in frame stores a flag indicating whether or not respective team members are currently logged-in to the collaboration suite. The device frame contains device identifiers and associated address information (PSTN destination number, IP address, email address) for each communication device identified by the respective team member in their current personal profile. The watcher's frame contains personal identifiers for each of the other members of the team who are currently also logged-in to the collaboration suite and who should be receiving preference and presence information with respect to members of the team (paragraph 0067). Hence Liversidge *et al.* only provides email address, IP address and PSTN destination number of those team members who are currently logged-in. So any member of team can send message to another member of the team by email address. But nowhere does Liversidge *et al.* teach generating ***dynamically customized automated responses to one or more messages based on a user's availability***. In contrast, applicants' claimed invention facilitates the dynamically generating customized responses to one or more messages based on a particular user's availability.

Moreover, as the Examiner acknowledges, Liversidge *et al.* does not teach or suggest a prediction model, and thus to cure this deficiency the Examiner offers Horvitz *et al.* Horvitz *et al.* provides an inference system that accesses an modeled event database to extract modeled event records for each of the modeled events that has occurred since a last cycle of inference. The inference system includes one or more knowledge bases and an inference engine.

Knowledge bases include information relating user actions and words, user's goals and needs for assistance (lines 39-55, column 18). The inference system analyzes a *modeled* event database which itself is stored in software and is designed to help a user in operating a software program. The system provided by the cited reference examines a user's action via free text queries for assistance and from this information generates probabilities about user needs and goals. Hence Horvitz *et al.* only provides a method for building an intelligent user assistance facility for a software program to assist a user in operating a software program. The other section of Horvitz *et al.* gives information only about the presence or absence of the user in front of computer (lines 28-37, column 10). However, Horvitz *et al.* does not teach ***a prediction model that predicts, based on the communication, collaboration and coordination, future availability and unavailability of the user, and an amount of time until the user returns to the communication, collaboration and coordination.***

In view of at least the foregoing, it is readily apparent that both Liversidge *et al.* and Horvitz *et al.* fail to teach or suggest all aspects of the claimed invention. Accordingly, it is respectfully requested that this rejection of independent claim 1 (and the claims that depend there from) should be withdrawn.

## **II. Rejection of Claims 4, 6, 7, 20, 21, 36 and 47 Under 35 U.S.C. §103(a)**

Claims 4, 6, 7, 20, 21, 36 and 47 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Liversidge *et al.*, Horvitz *et al.*, and Horvitz *et al.* ("Attention-Sensitive Alerting") (Horvitz 2 hereinafter). Withdrawal of this rejection is requested for at least the following reasons. Liversidge *et al.*, Horvitz *et al.*, and Horvitz *et al.* either alone or in combination, fail to teach or suggest all features of the subject claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. Finally, ***the prior art reference (or references when combined) must teach or suggest all the claim limitations.*** See MPEP §706.02(j). The teaching or suggestion to

make the claimed combination and the reasonable expectation of success must be found in the prior art and not based on the applicant's disclosure. *See In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (emphasis added).

Applicants' claimed invention relates to systems and methods to facilitate meetings, collaboration, coordination and communications between message senders and receivers, wherein a prediction model is constructed from past presence, actions, and calendar of a user to forecast the timing of the user's availability status. Specifically, independent claim 47 recites ***means for utilizing the prediction model to forecast availability and unavailability of a user and an amount of time until the user returns, the forecast of availability and unavailability based on a plurality of communications, and the forecast of the amount of time based on how long the user has already been absent.*** *Liversidge et al.*, *Horvitz et al.* and *Horvitz et al.* are both silent regarding such novel aspects of the claimed invention.

As noted above, *Liversidge et al.* relates to methods and systems for automatic handling of invitations to join communication sessions in a virtual team environment, but as the Examiner acknowledges, the primary reference does not teach or suggest means for building a prediction model from the stored context information, and means for generating an automated message response based upon forecasting information derived from the prediction model, the automated message response includes content dynamically transformed based at least in part on the forecasting information. Thus, to cure these deficiencies with respect to the primary document and the subject independent claim, the Examiner provides *Horvitz et al.* and *Horvitz et al.*

As stated *supra*, *Horvitz et al.* provides an inference system that accesses a modeled event database to extract modeled event records for each of the modeled events that has occurred since a last cycle of inference but does not teach or suggest ***utilizing the prediction model to forecast availability and unavailability of a user and an amount of time until the user returns, the forecast of availability and unavailability based on a plurality of communications, and the forecast of the amount of time based on how long the user has already been absent.*** Moreover, the tertiary document, *Horvitz et al.*, relates to utility-directed procedures for mediating the flow of potentially distracting alerts and communications to computer users, and in particular provides models and inference procedures that balance the context-sensitive costs of deferring alerts with the cost of interruption. The tertiary document however does not teach or suggest utilization of a

prediction model to forecast availability and unavailability of a user and an amount of time until the user returns, the forecast of availability and unavailability based on a plurality of communications, and the forecast of the amount of time based on how long the user has already been absent.

In view of at least the foregoing, it is apparent that Liversidge *et al.*, Horvitz *et al.*, and Horvitz *et al.* fail to teach or suggest all aspects of the claimed invention. Accordingly, it is respectfully requested that this rejection should be withdrawn.

### **III. Rejection of Claims 23 and 25 Under 35 U.S.C. §103(a)**

Claims 23 and 25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Liversidge *et al.* in view of Horvitz *et al.* and further in view of Horvitz “Principles of Mixed-Initiative User Interfaces” (Horvitz 3 hereinafter). It is respectfully requested that this rejection be withdrawn for at least the following reasons. Liversidge *et al.*, Horvitz and Horvitz 3 either alone or in combination do not teach or suggest all aspects set forth in the subject claims. Horvitz 3 relates to principles of mixed initiative user interface and does not make up for the aforementioned deficiencies of Liversidge *et al.* and Horvitz with respect to independent claim 1 (from which claim 23 and 25 depend). Thus it is submitted, the subject invention as recited in claim 23 and 25 is not obvious over the combination of Liversidge *et al.*, Horvitz *et al.* and Horvitz 3. Accordingly, it is respectfully submitted that this rejection should be withdrawn.

### **IV. Rejection of Claim 27 Under 35 U.S.C. §103(a)**

Claim 27 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Liversidge *et al.* in view of Horvitz *et al.* and further in view of Metcalfe (“After 35 years of technology Crusades, Bob Metcalfe rides off into the Sunset”) and Jensen *et al.* (US 5,930,828). It is respectfully requested that this rejection be withdrawn for at least the following reasons. Liversidge *et al.*, Horvitz *et al.*, Metcalfe and Jensen *et al.* either alone or in combination do not teach or suggest all aspects set forth in the subject claims. Jensen relates to minimizing disk fragmentation in a computer system and does not make up for the aforementioned deficiencies of Liversidge *et al.*, Horvitz *et al.* and Metcalfe with respect to independent claim 1 (from which claim 27 depends). Thus, the subject invention as recited in claim 27 is not obvious over the combination of Liversidge *et al.*, Horvitz *et al.*, Metcalfe and Jensen *et al.* Accordingly, it is

respectfully submitted that this rejection should be withdrawn.

**CONCLUSION**

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP213US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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